Delta 1
Unit 4 Review (Non-Calculator)
Fractions

How well did you do:

Fractions	Score = $\frac{\quad}{42}$	

Topics/skills which need to be revisited:	***Question of the Review***	***Further Practice from Delta 1***
• Simplify fraction fully • Find a fraction of a quantity	• 1 • 2,9	• P97 Q1 • P98 Q1,3
• Add/subtract simple fractions which have different denominators	• 3,5,8	• P105 Q5
• Change % into a fraction • Change % into a decimal • Change a fraction into a % • Change a fraction into a decimal using known facts	• 7a • 7b • 7c • 13	• P98 Q6 • P98 Q6 • P98 Q6 • P98 Q5
• Multiply a whole number by a fraction • Find a fraction of a fraction • Multiply a fraction by a fraction • Multiply a fraction by a fraction (where you could cancel diagonally first) • Divide a fraction by a fraction	• 4,10 • 12 • 14a • 14b • 14c	• P98 Q2 • P106 Q16 • P99 Q8ab • P99 Q8cd • P99 Q9
• Write hours and minutes as a mixed number of hours, in simplest form • Subtract two mixed numbers • Divide a mixed number by a fraction (where you could cancel diagonally) • Multiply and divide mixed numbers to solve a real-life problem	• 6 • 11 • 14d • 15	• P100 Q5 • P100 Q4,7 • P100 Q8c • P106 Q21

1 Write $\frac{18}{24}$ as a fraction in its simplest form.

.....

(1 mark)

2 Work out $\frac{3}{5}$ of £40

.....

(1 mark)

3 Work out the following, showing your working clearly

a $\frac{3}{8} + \frac{1}{4}$

..... **(2)**

b $\frac{11}{12} - \frac{3}{4}$

..... **(2)**

(4 marks)

4 Work out and give your answer as an improper fraction

$3 \times \frac{6}{7}$

.....

(1 mark)

5 Work out the following, showing your working, and give your answer as a mixed number if applicable.

$$\frac{2}{3} + \frac{3}{4} - \frac{1}{12}$$

.

.....

(2 marks)

6 Write each of these times as a mixed number of hours, in simplest form.

a 4 hours 30 minutes

.....

b 2 hours 24 minutes

.....

(2 marks)

7

a Change 24% into a fraction in its simplest form

..... **(1)**

b Change 150% into a decimal

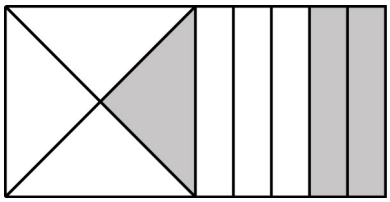
..... **(1)**

c Change $\frac{7}{8}$ into a percentage, showing your working

..... **(2)**

(4 marks)

8 This rectangle shown is made from two squares.



What fraction **<u>of the rectangle</u>** is shaded? Show your working clearly.

.....

(3 marks)

9 Scotland has an area of 768 000 km^2.

One sixth of the area is woodland.

Three quarters of the area of woodland is covered with pine trees.

Work out the area of woodland in Scotland covered with pine trees. Show your working clearly.

.....km^2

(3 marks)

10 When you multiply a positive number by a positive fraction that is smaller than one, is your answer bigger or smaller than the original number?

.....

(1 mark)

11 Work out $6\frac{1}{4} - 2\frac{2}{3}$ and give your answer as a mixed number. Show your working clearly.

.....

(3 marks)

12 Three fifths of the children in a school are boys. Seven eights of the girls in the school are right-handed.

What fraction of the children in the school are left-handed girls? Show your working clearly.

.....

(2 marks)

13 $\frac{1}{2} = 0.5, \quad \frac{1}{4} = 0.25, \quad \frac{1}{8} = 0.125$

Using the facts above:

a Express $\frac{3}{8}$ as a decimal, showing how you used the above fact(s)

..... **(2)**

b Explain how you would use the fact that $\frac{1}{8} = 0.125$ to find $\frac{1}{16}$ as a decimal

.....

.....

(1)

(3 marks)

14 Work out these. In each case give your answer in its simplest form. Show your working clearly.

a $\frac{7}{8} \times \frac{3}{10}$

..... **(1)**

b $\frac{24}{35} \times \frac{49}{64}$

..... **(2)**

c $\frac{4}{5} \div \frac{3}{7}$

..... **(2)**

d $2\frac{3}{5} \div \frac{7}{10}$

..... **(2)**

(7 marks)

15 Mr Lambert would like to paint one wall of his office bright blue to make it a 'feature wall'. His wall is rectangular and measures $4\frac{1}{3}$ *m* by $2\frac{1}{2}$ *m*. If each tin of paint will cover $1\frac{2}{3}$ m^2, how many tins of paint will he have to buy?

.....

(5 marks)

[End of Review]